West Virginia Department of Environmental Protection
Austin Caperton
Cabinet Secretary

Construction Permit

R13-3435

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Domestic Synthetic Fuels I, LLC
Domestic Synthetic Fuels I, LLC
053-00080

Laura M. Crowder
Director, Division of Air Quality

Issued: DRAFT

Facility Location:	Mason County Industrial Park, north of Point Pleasant, Mason County, WV
Mailing Address:	PO Box 292, Point Pleasant, WV 25550
Facility Description:	Direct Coal Liquefaction Facility
SIC/NAICS Code:	2911/324110
UTM Coordinates:	403.948 km Easting • 4,309.098 km Northing • Zone 17
Latitude/Longitude:	38.92554/-82.10807
Permit Type:	Construction
Description:	Construction of a Direct Coal Liquefaction Facility that will convert coal into ultra-low sulfur diesel fuel, gasoline, liquefied petroleum gases (LPGs), elemental sulfur, and flake product for sale to market.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

As a result of this permit, the source is a nonmajor or area source subject to 45CSR30. Therefore, the facility is not subject to the permitting requirements of 45CSR30 and is classified as a deferred source.

Unless otherwise stated, WVDEP DAQ did not determine whether the applicant is subject to an area source air toxics standard requiring Generally Achievable Control Technology (GACT) promulgated after January 1, 2007 pursuant to 40 CFR 63, including the area source air toxics provisions of 40 CFR 63, Subpart BBBBBB.

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1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Unit 100: Coal Handling					
100-TH-1	100-TH-1	Barge Receiving Hopper	2020	1,000 TPH	None
100-TC-1	100-TC-1	Coal Transfer Conveyer 1	2020	1,000 TPH	100-TC-1-FF
100-TC-2	100-TC-2	Coal Transfer Conveyer 2	2020	1,000 TPH	100-TC-2-FF
100-TH-2	100-TH-2	Radial Stacker Hopper	2020	1,000 TPH	100-TH-2-FF
100-TC-3	100-TC-3	Coal Transfer Conveyer 3	2020	1,000 TPH	100-TC-3-FF
100-CSP-1	100-CSP-1	Active Open Coal Storage Pile	2020	26,136 ft^2	Wind Shield
100-CSP-2	100-CSP-2	Backup Open Coal Storage Pile	2020	87,991 ft^2	Wind Shield
100-CSP-3	100-CSP-3	Truck Dump Open Coal Storage Pile	2020	530 ft^2	None
100-TU-1	100-TU-1	Coal Truck Unloading	2020	1,000 TPH	None
100-TH-3	100-TH-3	Coal Surge Hopper	2020	104.17 TPH	None
100-TC-4	100-TC-4	Coal Milling Transfer Conveyer 1	2020	104.17 TPH	100-TC-4-FF
100-TH-4	100-TH-4	Coal Milling Hopper 1	2020	104.17 TPH	100-TH-4-FF
100-CMD-1	100-CMD-1	Coal Milling Dryer	2020	13.45 mmBtu/hr	None
100-CM-1	100-BH-1	Coal Mill	2020	104.17 TPH	100-BH-1
100-TH-5	100-TH-5	Coal Milling Hopper 2	2020	104.17 TPH	100-TH-5-FF
100-TC-5	100-TC-5	Coal Milling Transfer Conveyer 2	2020	104.17 TPH	100-TC-5-FF
100-CS-1	100-CS-1	Coal Storage Silo 1	2020	104.17 TPH	100-CS-1-FF
100-CS-2	100-CS-2	Coal Storage Silo 2	2020	104.17 TPH	100-CS-2-FF
100-TH-6	100-TH-6	Coal Storage Silo 1 Hopper	2020	416.67 TPH	100-TH-6-FF
100-TH-7	100-TH-7	Coal Storage Silo 2 Hopper	2020	416.67 TPH	100-TH-7-FF
100-TC-6	100-TC-6	Coal Silo Transfer Conveyor 1	2020	416.67 TPH	100-TC-6-FF
100-TC-7	100-TC-7	Coal Silo Transfer Conveyor 2	2020	416.67 TPH	100-TC-7-FF
Unit 200: H-Coal					
200-D-110	200-S-108	Feed Coal Bin	2020	416.67 TPH	200-S-108-FF
200-S-105	200-S-105	Feed Coal Conveyer	2020	104.17 TPH	200-S-105-FF

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
200-H-102	200-H-102	Slurry Feed Heater	2020	74.02 mmBtu/hr	None
200-H-101	200-H-101	Hydrogen Heater	2020	15.34 mmBtu/hr	None
200-D-204	200-D-206	Feed Catalyst Bin	2020	2.20 TPH	200-D-206-FF
200-D-205	200-D-206	Feed Catalyst Bin	2020	2.20 TPH	200-D-206-FF
200-D-206[(1)]	200-D-206	Feed Catalyst Bin	2020	2.20 TPH	200-D-206-FF
200-D-206[(1)]	200-D-206	Spent Catalyst Withdrawal Bin	2020	3.52 TPH	None
200-D-207	200-D-207	Spent Catalyst Cooling Bin	2020	3.52 TPH	None
200-D-208	200-D-208	Spent Catalyst Loading Hopper	2020	3.52 TPH	None
200-D-209	200-D-209	Spent Catalyst Drums	2020	3.52 TPH	None
200-H-301	200-H-301	Vacuum Tower Feed Heater	2020	24.79 mmBtu/hr	None
200-FUG	200-FUG	Unit 200 Fugitive Emissions	2020	n/a	None
Unit 310: Hydrocracker					
310-H-101	310-H-101	Hydrocracker Reaction Heater	2020	8.37 mmBtu/hr	None
310-H-101	310-H-101	Fractionation Reboiler	2020	10.78 mmBtu/hr	None
310-FUG	310-FUG	Unit 310 Fugitive Emissions	2020	n/a	None
Unit 320: Catalytic Reformer					
320-H-201	320-H-201	Catalytic Reaction Heater 1	2020	11.89 mmBtu/hr	None
320-H-202	320-H-202	Catalytic Reaction Heater 2	2020	11.89 mmBtu/hr	None
320-H-203	320-H-203	Catalytic Reaction Heater 3	2020	11.89 mmBtu/hr	None
320-H-204	320-H-204	Catalytic Reaction Heater 4	2020	11.89 mmBtu/hr	None
320-FUG	320-FUG	Unit 320 Fugitive Emissions	2020	n/a	None
Unit 410: Gas Recovery Unit					
410-FUG	410-FUG	Unit 410 Fugitive Emissions	2020	n/a	None

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Unit 420: Amine Regeneration					
420-FUG	420-FUG	Unit 420 Fugitive Emissions	2020	n/a	None
Unit 430: Sour Water Stripping					
430-TK-1	430-TK-1	Sour Water Storage Tank	2020	210,000 gal	440-SRI-1
430-FUG	430-FUG	Unit 430 Fugitive Emissions	2020	n/a	None
Unit 440: Sulfur Recovery Unit					
440-CF-1	440-SRI-1	Claus Furnace	2020	4.40 mmBtu/hr	440-SRI-1
440-SRI-1	440-SRI-1	Sulfur Recovery Incinerator (SRI)	2020	10.60 mmBtu/hr	440-SRI-1
440-FUG	440-FUG	Unit 440 Fugitive Emissions	2020	n/a	None
Unit 500: Utilities					
500-SB-1	500-SB-1	Steam Boiler	2020	24.3 mmBtu/hr	None
500-EG-1	500-EG-1	Generac Model SD500 Emergency Generator	2020	671 HP	None
500-CT-1	500-CT-1	Cooling Towers	2020	5,565 gpm	Drift Eliminator
500-FUG	500-FUG	Unit 500 Fugitive Emissions	2020	n/a	None
Unit 610: Solid Products Handling					
610-TC-1	610-TC-1	Flaker Transfer Conveyer	2020	223,599 TPY	None
610-SS-1	610-SS-1	Surge Flake Storage Silo	2020	223,599 TPY	610-SS-1-FF
610-TC-2	610-TC-2	Pipe Conveyer 1	2020	223,599 TPY	610-TC-2-FF
610-TC-3	610-SD-1	Pipe Conveyer 2	2020	223,599 TPY	610-SD-1[(2)] 610-SD-1-FF
610-TC-4	610-SD-1	Stacker Conveyer 1	2020	223,599 TPY	610-SD-1[(2)] 610-SD-1-FF
610-SP-1	610-SD-1	Flaked Residue Storage Pile 1	2020	13,500 ft^2	610-SD-1[(2)] 610-SD-1-FF
610-TH-1	610-SD-1	Flaked Residue Loading Hopper 1	2020	223,599 TPY	610-SD-1[(2)] 610-SD-1-FF
610-TC-5	610-SD-2	Stacker Conveyer 2	2020	223,599 TPY	610-SD-2[(2)] 610-SD-2-FF

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
610-SP-2	610-SD-2	Flaked Residue Storage Pile 2	2020	13,500 ft^2	610-SD-2[(2)] 610-SD-2-FF
610-TH-2	610-SD-1	Flaked Residue Loading Hopper 2	2020	223,599 TPY	610-SD-2[(2)] 610-SD-2-FF
610-TC-6	610-SD-1 610-SD-2	Flake Residue Loading Conveyer	2020	223,599 TPY	610-SD-1[(2)] 610-SD-1-FF 610-SD-2[(2)] 610-SD-2-FF
610-TC-7	610-TC-7	Truck Loading Conveyer	2020	223,599 TPY	None
610-TH-3	610-TH-3	Truck Loading Hopper	2020	223,599 TPY	None
610-TR-1	610-TR-1	Flaked Residue Product Trucks	2020	223,599 TPY	None
610-TH-4	610-TH-4	Sulfur Storage Pile Hopper	2020	19,995 TPY	None
610-TC-8	610-TC-8	Sulfur Storage Pile Conveyer	2020	19,995 TPY	None
610-SP-3	610-SP-3	Sulfur Storage Pile	2020	511 ft^2	None
610-TH-5	610-TH-5	Sulfur Loading Hopper 1	2020	19,995 TPY	None
610-TC-9	610-TC-9	Sulfur Loading Conveyer	2020	19,995 TPY	None
610-TH-6	610-TH-6	Sulfur Loading Hopper 2	2020	19,995 TPY	None
610-TR-2	610-TR-2	Sulfur Product Trucks	2020	19,995 TPY	None
Unit 620: Flare System					
620-FL-1	620-FL-1	Emergency Flare	2020	6.2 mmscf/hr	n/a
620-FUG	620-FUG	Unit 620 Fugitive Emissions	2020	n/a	None
Unit 630: Liquid Products and Intermediates Storage					
630-TK-1A through 630-TK-1I	n/a	LPG Storage Tank	2020	60,000 gal (each)	n/a
630-TK-2	640-FL-1	Light Naphtha Storage Tank 1	2020	126,000 gal	640-FL-1
630-TK-3	640-FL-1	Light Naphtha Storage Tank 2	2020	126,000 gal	640-FL-1
630-TK-4	630-TK-4	Reformate Storage Tank 1	2020	168,000 gal	None
630-TK-5	630-TK-5	Reformate Storage Tank 2	2020	168,000 gal	None
630-TK-6	640-FL-1	Gasoline Storage Tank 1	2020	840,000 gal	640-FL-1
630-TK-7	640-FL-1	Gasoline Storage Tank 2	2020	840,000 gal	640-FL-1
630-TK-8	630-TK-8	Diesel Storage Tank 1	2020	1,197,000 gal	None

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
630-TK-9	630-TK-9	Diesel Storage Tank 2	2020	1,197,000 gal	None
630-TK-10	640-FL-1	Ethanol Storage Tank 1	2020	168,000 gal	640-FL-1
630-TK-11	640-FL-1	Ethanol Storage Tank 2	2020	168,000 gal	640-FL-1
630-TK-12	630-TK-12	HYK Heavy Feed Storage Tank	2020	126,000 gal	None
630-TK-13	630-TK-13	HYK Light Feed Storage Tank	2020	670,000 gal	None
630-TK-14	630-TK-14	Heavy Slop Oil Storage Tank	2020	670,000 gal	None
630-TK-15	630-TK-15	Light Slop Oil Storage Tank	2020	670,000 gal	None
630-FUG	630-FUG	Unit 630 Fugitive Emissions	2020	n/a	None
Unit 640: Liquid Product Loadout					
640-FL-1	640-FL-1	Liquid Product Loadout Flare	2020	4.99 mmscf/hr	n/a
640-TR-1	640-TR-1 640-FL-1	Gasoline Truck Loading Rack	2020	2,400 gpm	640-FL-1
640-TR-2	640-TR-2	Diesel Truck Loading Rack	2020	3,600 gpm	None
640-TR-3	640-TR-3	LPG Truck Loading Rack	2020	600 gpm	None
640-RR-1	640-RR-1 640-FL-1	Gasoline Rail Loading Rack	2020	800 gpm	640-FL-1
640-RR-2	640-RR-2	Diesel Rail Loading Rack	2020	800 gpm	None
640-BR-1	640-BR-1 640-FL-1	Gasoline Barge Loading Rack	2020	1,800 gpm	640-FL-1
640-BR-2	640-BR-2	Diesel Barge Loading Rack	2020	1,800 gpm	None
640-FUG	640-FUG	Unit 640 Fugitive Emissions	2020	n/a	None
Unit 700: Hydrogen Plant					
700-HR-1	700-HR-1	Hydrogen Reformer	2020	537 mmBtu/hr	SCR

(1) This bin may be used in two different functional roles.

(2) Each Flaked Storage Pile and associated conveying/loading equipment is located inside a fully enclosed dome that is evacuated through a fabric filter.

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45 CSR § 30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NSPS**	New Source Performance Standards
CBI	Confidential Business Information	**PM**	Particulate Matter
CEM	Continuous Emission Monitor	**$PM_{2.5}$**	Particulate Matter less than 2.5µm in diameter
CES	Certified Emission Statement	**PM_{10}**	Particulate Matter less than 10µm in diameter
C.F.R. *or* CFR	Code of Federal Regulations	**Ppb**	Pounds per Batch
CO	Carbon Monoxide	**pph**	Pounds per Hour
C.S.R. *or* CSR	Codes of State Rules	**ppm**	Parts per Million
DAQ	Division of Air Quality	**Ppmv or ppmv**	Parts per million by volume
DEP	Department of Environmental Protection	**PSD**	Prevention of Significant Deterioration
dscm	Dry Standard Cubic Meter	**psi**	Pounds per Square Inch
FOIA	Freedom of Information Act	**SIC**	Standard Industrial Classification
HAP	Hazardous Air Pollutant	**SIP**	State Implementation Plan
HON	Hazardous Organic NESHAP	**SO_2**	Sulfur Dioxide
HP	Horsepower	**TAP**	Toxic Air Pollutant
lbs/hr	Pounds per Hour	**TPY**	Tons per Year
LDAR	Leak Detection and Repair	**TRS**	Total Reduced Sulfur
M	Thousand	**TSP**	Total Suspended Particulate
MACT	Maximum Achievable Control Technology	**USEPA**	United States Environmental Protection Agency
MDHI	Maximum Design Heat Input	**UTM**	Universal Transverse Mercator
MM	Million	**VEE**	Visual Emissions Evaluation
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**VOC**	Volatile Organic Compounds
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour	**VOL**	Volatile Organic Liquids
NA	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation.*

2.4. Term and Renewal

2.4.1. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule.

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3435 and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.10 and 13-10.3]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10. Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and,

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45 C.S.R. 11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

3.2.1. **Emission Limit Averaging Time.** Unless otherwise specified, compliance with all annual limits shall be based on a rolling twelve month total. A rolling twelve month total shall be the sum of the measured parameter of the previous twelve calendar months. Compliance with all hourly emission limits shall be based on the applicable NAAQS averaging times or, where applicable, as given in any approved performance test method.

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State-Enforceable only.*]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by email as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304-2345

If to the US EPA:

Section Chief
U.S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air Section (3ED21)
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1] For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. **Operating Fee.**

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.4.2. In accordance with 45CSR30 – Operating Permit Program, enclosed with this permit is a Certified Emissions Statement (CES) Invoice, from the date of initial startup through the following June 30. Said invoice and the appropriate fee shall be submitted to this office no later than 30 days prior to the date of initial startup. For any startup date other than July 1, the permittee shall pay a fee or prorated fee in accordance with the Section 4.5 of 45CSR22. A copy of this schedule may be found attached to the Certified Emissions Statement (CES) Invoice.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. Only those emission units/sources as identified in Table 1.0, with the exception of any *de minimis* sources as identified under Table 45-13B of 45CSR13, are authorized at the permitted facility by this permit. In accordance with the information filed in Permit Application R13-3435, the emission units/sources identified under Table 1.0 of this permit shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities, shall use the specified control devices, and comply with any other information provided under Table 1.0.

4.1.2. **Production Capacities**

The permittee shall not exceed the annual maximum production capacities given in the following table for the products specified:

Table 4.1.2: Production Capacities

Product	Annual Production Limit	Units
Diesel	100,426,830	gallons/year
Raw Gasoline	52,137,330	gallons/year
Heavy Naphtha	30,445,380	gallons/year
Light Naphtha	21,691,950	gallons/year
LPG	22,903,020	gallons/year
Sour Water	68,985,000	gallons/year
Flake Residue	223,599	tons/year
Elemental Sulfur	19,995	tons/year
Liquid Ammonia	118,625	tons/year

4.1.3. **Material Handling/Processing**

The coal processing and conveying equipment, coal storage systems, transfer and loading systems, the feed/spent catalyst handling operations, the solid product handling operations, and the open storage piles are subject to the following requirements:

a. **Throughput Limits**

Coal feedstock precessing/handling throughput limits shall not exceed the following:

(1) The coal handling equipment upstream of the feedstock coal storage piles shall have a maximum design capacity of 1,000 tons/hour;

(2) The throughput of coal in Unit 200 shall not exceed 2,500 tons/day; and

(3) The permittee shall not process a maximum annual amount of feedstock coal in excess of 912,500 tons per year;

b. **Fabric Filter/Baghouses**

The permittee shall use fabric filters/baghouses on all material handling equipment as required under Table 1.0 above. Each fabric filter shall be designed, operated, and maintained so as to guarantee that no gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf) are released from the control device. The airflow capacity (in acfm) of the associated fabric filter/baghouse fan(s) shall not exceed the values used in the calculations given in Attachment N of Permit Application R13-3435. Each fabric filter/baghouse emission point shall not exceed the the total particulate matter emissions as calculated in Attachment N of Permit Application R13-3435.

c. **Storage Areas**

All coal and product storage shall be in accordance with the following:

(1) The permittee is authorized to operate one (1) Truck Dump Open Coal Storage Pile (100-CSP-3) that shall not exceed a base of 530 ft^2;

(2) The permittee is authorized to operate one (1) Active Open Coal Storage Pile (100-CSP-1) that shall not exceed a base of 26,136 ft^2 and shall utilize wind shields on all sides to minimize the potential fugitive emissions of particulate matter from wind erosion and pile activity;

(3) The permittee is authorized to operate one (1) Backup Open Coal Storage Pile (100-CSP-2) that shall not exceed a base of 87,991 ft^2 and shall utilize wind shields on all sides to minimize the potential fugitive emissions of particulate matter from wind erosion and pile activity;

(4) The permittee is authorized to operate one (1) Sulfur Storage Pit (610-SP-3) that shall not exceed a base of 511 ft^2;

(5) The permittee is authorized to operate two (2) Flaked Residue Storage Piles (610-SP-1 and 610-SP-2) that shall each not exceed a base of 13,500 ft^2 and which shall each be fully enclosed in a storage dome (610-SD-1 and 610-SD-2). Each storage dome shall be controlled by a fabric filter (610-SD-1-FF and 610-SD-2-FF);

(6) For all storage piles, the permittee shall manage on-pile activity so as to minimize the release of emissions; and

(7) All wind shields shall be reasonably maintained and any significant holes shall be repaired immediately.

d. **Haulroads and Mobile Work Areas**

Fugitive particulate emissions resulting from use of haulroads and mobile work areas shall be minimized by the following:

(1) The permittee shall pave, and maintain such pavement, on all haulroads and mobile work areas (including a reasonable shoulder area) within the plant boundary;

(2) The permittee shall maintain access to a vacuum sweeper truck in good operating condition, and shall utilize same as needed to remove excess dirt and dust from all haulroads and mobile work areas. The haulroads and mobile work areas shall be flushed with water immediately prior to each vacuum sweeping (flushing may be part of vacuum sweeper truck); and

(3) The permittee shall collect, in a timely fashion, material spilled on haulroads that could become airborne if it dried or were subject to vehicle traffic.

e. **45CSR5**

The coal processing and conveying equipment are subject to all applicable requirements under 45CSR5 including the following:

(1) The permittee shall not cause, suffer, allow or permit emission of particulate matter into the open air from any stack which is twenty percent (20%) opacity or greater, except as noted in subsection 3.2 of 45CSR5.
[45CSR§5-3.1]

(2) The permittee shall not cause, suffer, allow or permit emission of particulate matter into the open air from any fugitive dust control system which is twenty percent (20%) opacity or greater.
[45CSR§5-3.4]

(3) The permittee shall not cause, suffer, allow or permit a coal preparation plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air.
[45CSR§5-6.1]

(4) The owner or operator of a coal preparation plant or handling operation shall maintain dust control of the premises and owned, leased or controlled access roads by paving, or other suitable measures. Good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening and general maintenance to minimize dust generation and atmospheric entrainment.
[45CSR§5-6.2]

f. **45CSR7**

The feed/spent catalyst handling operations and the solid product handling operations are subject to all applicable requirements under 45CSR7 including the following:

(1) No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.
[45CSR§7-3.1]

(2) The provisions of subsection 3.1 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR§7-3.2]

(3) No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of this rule.
[45CSR§7-4.1]

(4) No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable. **[45CSR§7-5.1]**

g. **40 CFR 60, Subpart Y**

The coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles are subject to all applicable requirements under 40 CFR 60, Subpart Y (pursuant to §60.252(c), as the Coal Milling Dryer receives all of its thermal input from an affected facility covered under 40 CFR 60, Subpart Dc, it is not subject to the requirements of Subpart Y), including the following:

(1) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) through (3) of this section, as applicable to the affected facility. **[40 CFR §60.254(b)]**

(1) Except as provided in paragraph (b)(3) of this section, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater. **[40 CFR §60.254(b)(1)]**

(2) The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf). **[40 CFR §60.254(b)(2)]**

(3) Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of paragraph (b)(1) of this section. **[40 CFR §60.254(b)(3)]**

4.1.4. **Coal Milling Dryer/Steam Boiler**

The Coal Milling Dryer (100-CMD-1) and the Steam Boiler (500-SB-1) are subject to the following requirements:

a. Each unit shall be fired by pipeline-quality natural gas (PNG), fuel gas from Unit 410, or a combination thereof, shall not exceed the MDHI as given under Table 1.0 of this permit, and shall not exceed the maximum emission limits for the specified unit as given in the following table:

Table 4.1.4(a): Coal Milling Dryer/Steam Boiler Emission Limits

Process Heater	CO		NO_x		PM(1)		SO_x		VOC		HAPs	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	ppm_v	TPY	lb/hr	TPY	lb/hr	TPY
Coal Milling Dryer (100-CMD-1)	1.23	5.39	1.47	6.42	0.11	0.49	3.5	0.04	0.08	0.35	0.03	0.12
Steam Boiler (500-SB-1)	2.22	2.58	0.85	0.99	0.20	0.23	3.5	0.02	0.13	0.12	0.05	0.06

(1) All particulate matter emissions are assumed to be $PM_{2.5}$ or smaller. Includes condensables.

b. The aggregate amount of PNG and fuel gas combusted in the Steam Boiler (500-SB-1) shall not exceed 61.45 mmscf/yr;

c. **45CSR2**
The Coal Milling Dryer (100-CMD-1) and the Steam Boiler (500-SB-1) are subject to the applicable requirements under 45CSR2 including the following:

(1) No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1]

(2) No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

(i) For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in million B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units; and
[45CSR§2-4.1(a)]

(3) The visible emission standards set forth in section 3 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.
[45CSR§2-9.1]

d. **45CSR10**
The Coal Milling Dryer (100-CMD-1) and the Steam Boiler (500-SB-1) are subject to the applicable requirements under 45CSR10 including the following:

(1) Total Allowable Emission Rates for Similar Units in Priority I and Priority II Regions -- No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:
[45CSR§10-3.1]

(i) For Type 'b' and Type 'c' fuel burning units, the product of 3.1 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.
[45CSR§10-3.1(e)]

(2) No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.
[45CSR§10-5.1]

e. **40 CFR 60, Subpart Dc**
The Coal Milling Dryer (100-CMD-1) and the Steam Boiler (500-SB-1) are subject to the applicable requirements of 40 CFR 60, Subpart Dc.

f. **40 CFR 60, Subpart Ja**
Each Coal Milling Dryer (100-CMD-1) and the Steam Boiler (500-SB-1) are subject to all applicable requirements under 40 CFR 60, Subpart Ja including the following:

(1) Each owner or operator of an affected fuel gas combustion device shall comply with the emissions limits in paragraphs (g)(1) and (2) of this section.
[40 CFR §60.102a(g)]

(i) Except as provided in (g)(1)(iii) of this section, for each fuel gas combustion device, the owner or operator shall comply with either the emission limit in paragraph (g)(1)(i) of this section or the fuel gas concentration limit in paragraph (g)(1)(ii) of this section. For CO boilers or furnaces that are part of a fluid catalytic cracking unit or fluid coking unit affected facility, the owner or operator shall comply with the fuel gas concentration limit in paragraph (g)(1)(ii) for all fuel gas streams combusted in these units.
[40 CFR §60.102a(g)(1)]

(A) The owner or operator shall not discharge or cause the discharge of any gases into the atmosphere that contain SO_2 in excess of 20 ppm_v (dry basis, corrected to 0-percent excess air) determined hourly on a 3-hour rolling average basis and SO_2 in excess of 8 ppm_v (dry basis, corrected to 0-percent excess air), determined daily on a 365 successive calendar day rolling average basis; or
[40 CFR §60.102a(g)(1)(i)]

(B) The owner or operator shall not burn in any fuel gas combustion device any fuel gas that contains H_2S in excess of 162 ppm_v determined hourly on a 3-hour rolling average basis and H_2S in excess of 60 ppm_v determined daily on a 365 successive calendar day rolling average basis.
[40 CFR §60.102a(g)(1)(ii)]

4.1.5. **Process Heaters**
The process heaters, identified as the Slurry Feed Heater (200-H-102), the Hydrogen Heater (200-H-101), the Fractionation Reboiler (310-H-101), the Vacuum Tower Feed Heater (200-H-301), the Hydrocracker Reaction Heater (310-H-101), and the Catalyst Reaction Heaters (320-H-201 through 204), are subject to the following requirements:

a. Each unit shall be fired by pipeline-quality natural gas (PNG), fuel gas from Unit 410, or a combination thereof, shall not exceed the MDHI as given under Table 1.0 of this permit, and shall not exceed the maximum emission limits for the specified process heaters given in the following table:

Table 4.1.5(a): Process Heaters Emission Limits

Process Heater	CO		NO_x		PM[1]		SO_x		VOC		HAPs	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	ppm_v	TPY	lb/hr	TPY	lb/hr	TPY
Slurry Feed Heater (200-H-102)	2.29	9.98	2.96	12.97	1.00	4.38	3.5	0.27	0.56	2.43	0.20	0.86

Process Heater	CO		NO_x		PM[(1)]		SO_x		VOC		HAPs	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	ppm_v	TPY	lb/hr	TPY	lb/hr	TPY
Hydrogen Heater (200-H-101)	0.47	2.07	0.71	3.10	0.21	0.91	3.5	0.06	0.13	0.55	0.04	0.18
Fractionation Reboiler (310-H-101)	0.33	1.45	0.50	2.18	0.15	0.64	3.5	0.04	0.09	0.39	0.03	0.12
Vacuum Tower Feed Heater (200-H-301)	0.76	3.34	1.15	5.02	0.34	1.47	3.5	0.09	0.21	0.90	0.07	0.29
Hydrocracker Reaction Heater (310-H-101)	0.26	1.13	0.39	1.69	0.11	0.49	3.5	0.03	0.07	0.30	0.02	0.10
Catalyst Reaction Heaters (320-H-201/4)	0.37	1.61	0.55	2.41	0.16	0.70	3.5	0.04	0.10	0.43	0.03	0.14

(1) All particulate matter emissions are assumed to be $PM_{2.5}$ or smaller. Includes condensables.

b. **45CSR10**

The process heaters identified under Table 4.1.5(a) above are subject to all applicable requirements under 45CSR10 including the following:

(1) No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.
[45CSR§10-4.1]

(2) No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.
[45CSR§10-5.1]

c. **40 CFR 60, Subpart Ja**

Each process heater identified under Table 4.1.5(a) above is subject to all applicable requirements under 40 CFR 60, Subpart Ja including 4.1.5(c)(1)(i) below. Only the Slurry Feed Heater (200-H-102) is subject to the requirement given under 4.1.5(c)(1)(ii) below.

(1) Each owner or operator of an affected fuel gas combustion device shall comply with the emissions limits in paragraphs (g)(1) and (2) of this section.
[40 CFR §60.102a(g)]

(i) Except as provided in (g)(1)(iii) of this section, for each fuel gas combustion device, the owner or operator shall comply with either the emission limit in paragraph (g)(1)(i) of this section or the fuel gas concentration limit in paragraph (g)(1)(ii) of this section. For CO boilers or furnaces that are part of a fluid catalytic cracking unit or fluid coking unit

affected facility, the owner or operator shall comply with the fuel gas concentration limit in paragraph (g)(1)(ii) for all fuel gas streams combusted in these units.
[40 CFR §60.102a(g)(1)]

(A) The owner or operator shall not discharge or cause the discharge of any gases into the atmosphere that contain SO_2 in excess of 20 ppm_v (dry basis, corrected to 0-percent excess air) determined hourly on a 3-hour rolling average basis and SO_2 in excess of 8 ppm_v (dry basis, corrected to 0-percent excess air), determined daily on a 365 successive calendar day rolling average basis; or
[40 CFR §60.102a(g)(1)(i)]

(B) The owner or operator shall not burn in any fuel gas combustion device any fuel gas that contains H_2S in excess of 162 ppm_v determined hourly on a 3-hour rolling average basis and H_2S in excess of 60 ppm_v determined daily on a 365 successive calendar day rolling average basis.
[40 CFR §60.102a(g)(1)(ii)]

(ii) For each process heater with a rated capacity of greater than 40 million British thermal units per hour (MMBtu/hr) on a higher heating value basis, the owner or operator shall not discharge to the atmosphere any emissions of NO_X in excess of the applicable limits in paragraphs (g)(2)(i) through (iv) of this section.
[40 CFR §60.102a(g)(2)]

(A) For each natural draft process heater, comply with the limit in either paragraph (g)(2)(i)(A) or (B) of this section. The owner or operator may comply with either limit at any time, provided that the appropriate parameters for each alternative are monitored as specified in §60.107a; if fuel gas composition is not monitored as specified in §60.107a(d), the owner or operator must comply with the concentration limits in paragraph (g)(2)(i)(A) of this section.
[40 CFR §60.102a(g)(2)(i)]

(I) 40 ppmv (dry basis, corrected to 0-percent excess air) determined daily on a 30-day rolling average basis; or
[40 CFR §60.102a(g)(2)(i)(A)]

(II) 0.040 pounds per million British thermal units (lb/MMBtu) higher heating value basis determined daily on a 30-day rolling average basis.
[40 CFR §60.102a(g)(2)(i)(B)]

4.1.6. **Hydrogen Reformer**

The Hydrogen Reformer (700-HR-1) is subject to the following requirements:

a. The Hydrogen Reformer shall not exceed an MDHI of 537.00 mmBtu/hr, shall only be fired by PNG or a combination of PNG and fuel gas (at a maximum of a 90/10 ratio of PNG/fuel gas), and shall not exceed those emission limits given in the following table during all periods of operation unless otherwise noted):

Table 4.1.6(a): Hydrogen Reformer Emission Limits[1]

Pollutant	PPH	TPY
CO	6.60	28.90
NO_x	4.13	18.98
NO_x (startup)	34.37	
PM[2]	4.45	19.47
SO_2	0.35	1.54
VOCs	3.23	14.14
HAPs	0.87	3.80

(1) These emission limits are valid for all operational scenarios including startup and steady-state operation except for the specific NO_x emission limits as noted.
(2) All particulate matter emissions are assumed to be $PM_{2.5}$ or smaller. Includes condensables.

b. With the exception of a maximum of 60 hours per year during startup operations, at all times the Hydrogen Reformer is in operation, the unit shall be controlled by Selective Catalytic Reduction (SCR) for control of NO_x emissions. Use of the SCR shall be in accordance with the following:

(1) The SCR systems and oxidation catalysts shall be designed, operated and maintained according to good engineering practices and manufacturing recommendations so as to achieve, at a minimum, the following limits:
(i) NO_x: 0.008 lb/mmBtu;
(ii) CO: 0.012 lb/mmBtu; and
(iii) VOCs: 0.006 lb/mmBtu.

(2) Catalyst performance shall be monitored and catalysts replaced according to good engineering practices and manufacturing recommendations; and

(3) The permittee shall maintain the proper temperature profile for NO_x removal and shall operate the SCR in the optimal aqueous ammonia injection range as determined according to manufacturer recommendations or during the required performance testing.

c. **45CSR10**
The Hydrogen Reformer is subject to all applicable requirements under 45CSR10 including the following:

(1) No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible. **[45CSR§10-5.1]**

d. **40 CFR 60, Subpart Ja**
The Hydrogen Reformer is subject to all applicable requirements under 40 CFR 60, Subpart Ja including those given under 4.1.5(c)(1)(i) and (ii) above.

4.1.7. **Unit 420: Amine Regeneration/Unit 430: Sour Water Stripping**

The permittee shall operate 420: Amine Regeneration and Unit 430: Sour Water Stripping according to the following requirements:

a. The waste gases from the following sources shall be collected and routed through a closed vent system to the (after first being sent to the Acid Gas Wash Drum) Sulfur Recovery Incinerator (440-SRI-1):

(1) Acid gas from Amine Regenerator Reflex Drum (420-D-102);

(2) Acid gas from H_2SStripper Overhead Knockout Drum (430-D-102); and

(3) Pursuant to Subpart QQQ, the Sour Water Flash Gas from the Sour Water Storage Tank (430-T-101) - defined in this case as an "oil-water separator" under Subpart QQQ.

b. The maximum amount carbonyl sulfide (COS) and hydrogen sulfide (H_2S) sent to the SRI from the sources identified under 4.1.7(1) through (3) shall not exceed 1.03 lbs/hour and 0.09 lbs/hr, respectively; and

c. The permittee shall comply with all applicable requirements of 40 CFR 60, Subpart QQQ concerning the handling of wastewater generated at the facility.

4.1.8. **Liquid Products and Intermediates Storage Tanks**

Use of process and storage tanks, identified as 630-TK-1 through 630-TK-15 and 430-TK-1, shall be in accordance with the following:

a. Tank size (gallons), material stored, aggregate annual storage tank throughputs (gallons), and control strategies for all specified tanks shall not exceed those given in the following table:

Table 4.1.8(a): Storage Tanks Operational Limits

Tank ID	Material Stored	Tank Size (gallons)	Throughput (gallons)	Pressurized (Y/N?)	Internal Floating Roof (Y/N?)	Control Device	Subpart Kb (Y/N?)
630-TK-1A through 63-TK-1I	LPG	60,000 (each)	22,903,020 (total)	Y	N	n/a	N
				Y	N	n/a	N
630-TK-2	Light Naphtha	126,000	21,691,950	N	Y	Flare(1)	N
630-TK-3		126,000		N	Y	Flare(1)	N
630-TK-4	Reformate (Heavy Naphtha)	168,000	30,445,380	N	Y	None	N
630-TK-5		168,000		N	Y	None	N
630-TK-6	Gasoline	840,000	52,137,330	N	Y	Flare(1)	Y
630-TK-7		840,000		N	Y	Flare(1)	Y
630-TK-8	Diesel	1,197,000	100,426,830	N	N	None	N
630-TK-9		1,197,000		N	N	None	N
630-TK-10	Ethanol	168,000	9,200,704	N	Y	Flare(1)	Y
630-TK-11		168,000		N	Y	Flare(1)	Y
630-TK-12	HYK Heavy Feed(3)	126,000	209,454	N	N	None(3)	N

Tank ID	Material Stored	Tank Size (gallons)	Throughput (gallons)	Pressurized (Y/N?)	Internal Floating Roof (Y/N?)	Control Device	Subpart Kb (Y/N?)
630-TK-13	HYK Light Feed(3)	672,000	1,316,572	N	Y	None(3)	N
630-TK-14	Heavy Slop Oil	672,000	1,316,572	N	N	None	N
630-TK-15	Light Slop Oil	672,000	1,316,572	N	Y	None	N
430-TK-1	Sour Water	210,000	165,179,261	N	Y	SRI(2)	N

(1) Vapors are captured from the storage tank and routed through a **closed vent system** to the Liquid Product Loadout Flare (640-FL-1).
(2) Vapors are captured from the storage tank and routed through a **closed vent system** to the Sulfur Recovery Unit Incinerator (440-SRI-1).
(3) These tanks are under normal operating conditions process vessels that do not store these materials and when operating in that scenario displaced vapors are routed through a **closed vent system** to the Emergency Flare (620-FL-1). However, during a plant shutdown, they will serve as storage tanks for up to one month/year and during those times are uncontrolled.

b. The aggregate controlled (where applicable) emissions of VOCs from all storage shall not exceed 0.53 pounds/hour and 1.62 tons/year. The aggregate controlled (where applicable) emissions of HAPs from all storage tanks shall not exceed 0.07 pounds/hour and 0.26 tons/year; and

c. **40 CFR 60, Subpart Kb**
Storage tanks as identified under Table 4.1.8(a) above are subject to all applicable requirements under 40 CFR 60, Subpart Kb including the following:

(1) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:
[40 CFR§60.112b(a)]

(i) A fixed roof in combination with an internal floating roof meeting the following specifications:

(A) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
[40 CFR§60.112b(a)(1)(i)]

(B) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
[40 CFR§60.112b(a)(1)(ii)]

(I) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
[40 CFR§60.112b(a)(1)(ii)(A)]

(II) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
[40 CFR§60.112b(a)(1)(ii)(B)]

(III) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
[40 CFR§60.112b(a)(1)(ii)(C)]

(C) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
[40 CFR§60.112b(a)(1)(iii)]

(D) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
[40 CFR§60.112b(a)(1)(iv)]

(E) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
[40 CFR§60.112b(a)(1)(v)]

(F) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
[40 CFR§60.112b(a)(1)(vi)]

(G) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
[40 CFR§60.112b(a)(1)(vii)]

(H) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
[40 CFR§60.112b(a)(1)(viii)]

(I) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
[40 CFR§60.112b(a)(1)(ix)]

(ii) A closed vent system and control device meeting the following specifications:

(A) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, §60.485(b).
[40 CFR§60.112b(a)(3)(i)]

(B) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (§60.18) of the General Provisions.
[40 CFR§60.112b(a)(3)(ii)]

4.1.9. **Truck/Railcar/Barge Loadout**

The truck, railcar, and barge loading operations shall be in accordance with the following requirements:

a. The maximum design capacity of the specific material loading/unloading operations (gpm), the maximum aggregate annual product loading throughputs (gallons), and the maximum emissions shall not exceed the following for the specific liquids:

Table 4.1.9(a): Material Loading/Unloading Operations

Emission Unit ID	Material Loaded/Unloaded	Truck (gpm)	Rail (gpm)	Truck/Rail Throughput (gallons)	Barge (gpm)	Barge Throughput (gallons)
640-TR-1 640-RR-1 640-BR-1	Gasoline(1)	2,400	800	46,924,000	1,800	5,214,000
640-TR-2 640-RR-2 640-BR-2	Diesel	3,600	800	32,043,000	1,800	68,384,000
640-TR-3	LPG	600	n/a	3,731 (Events)(2)	n/a	n/a

(1) Gasoline from the two (2) storage tanks (630-TK-6/7) is blended with ethanol from the two (2) storage tanks (630-TK-10/11) to fill transports with finished gasoline (15% ethanol blend). The maximum design and annual throughput limits are applicable to this blended gasoline.
(2) This limit is for loading events, not throughput.

b. With the exception of LPG, all truck, railcar, and barge loading operations shall be conducted using the submerged-fill method. The "submerged-fill method" shall, for the purposes of this permit, mean either bottom-filling or filling by extending the pipe to near the bottom of the tank, and as soon as is practicable, below the level of liquid;

c. All gasoline product loading operations shall be conducted with a vapor capture system installed, maintained, and operated so as to achieve a minimum capture efficiency of displaced tank vapors of 99.2%. All vapors captured during loading operations shall be sent, via a closed vent system, back to the gasoline storage tanks which are controlled by the Liquid Product Loadout Flare (see Table 4.1.8(a)) or sent, , via a closed vent system, directly to the Liquid Product Loadout Flare; and

d. The maximum uncaptured emissions of VOCs from all product loading operations shall not exceed 17.68 pounds/hour and 5.79 tons/year. The maximum uncaptured emissions of HAPs from all product loading operations shall not exceed 3.96 pounds/hour and 0.55 tons/year.

e **40 CFR 60, Subpart XX**
The truck, railcar, and barge gasoline loading operations shall be in accordance with all applicable requirements under 40 CFR 60, Subpart XX including those given under §60.502.

4.1.10. **Cooling Tower**
The Cooling Tower, identified as 500-CT-1, shall operate in accordance with the following requirements:

a. The Cooling Tower shall be of an induced draft wet design and shall not exceed a maximum cooling water design capacity flow rate of 5,565 gpm; and

b. The maximum total particulate matter emissions from operation of the Cooling Tower shall not exceed 6.34 lbs/hr and 27.79 TPY.

4.1.11. **Emergency Generator**
The Emergency Generator, identified as 500-EG-1, shall meet the following requirements:

a. The Emergency Generator shall be a Generac Model SD500, shall not exceed 671 hp (500 kW_e), shall be fired only with diesel fuel with a maximum sulfur content not to exceed 0.05%, and shall not operate in excess of 100 hours per year during times not defined as emergencies;

b. The maximum emissions from each Emergency Generator shall not exceed the limits given in the following table:

Table 4.1.11(b): Per-Emergency Generator Emission Limits

Pollutant	PPH	TPY
CO	4.06	0.20
NO_x	18.85	0.94
PM(1)	1.33	0.07
SO_2	1.24	0.06
VOCs	1.54	0.08
HAPs	0.01	0.01

(1) All particulate matter emissions are assumed to be $PM_{2.5}$ or smaller. Includes condensables.

c. **40 CFR 60, Subpart IIII**
The Emergency Generator is subject to all applicable requirements under 40 CFR 60, Subpart IIII including the following:

(1) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
[40 CFR §60.4205(b)]

(2) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.
[40 CFR §60.4202(a)]

(i) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.
[40 CFR §60.4202(a)(2)]

d. **40 CFR 63, Subpart ZZZZ**
An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.
[40 CFR §63.6590(c)]

4.1.12. **Sulfur Recovery Unit**
The Unit 440: Sulfur Recovery Unit (SRU) shall operate according to the following requirements:

a. The Acid Gas Wash Drum (440-D-101) shall be constructed, operated, and maintained to route collected vapors to the Sulfur Recovery Incinerator (440-SRI-1);

b. The Sulfur Recovery Incinerator (440-SRI-1) shall be designed, operated, and maintained according to good engineering practices or manufacturing recommendations so as to achieve, at a minimum, a hydrocarbon and total reduced sulfur (TRS) combustion rate of 98.0%;

c. The Claus Furnace (440-CF-1) and the Sulfur Recovery Incinerator shall each not exceed the MDHI as given under Table 1.0 of this permit, and shall not exceed the maximum aggregate emission limits as given in the following table:

Table 4.1.12(c): Claus Furnace/Sulfur Recovery Incinerator Emission Limits

Pollutant	PPH	TPY
CO	1.70	7.43
NO_x	4.22	18.48
PM(2)	0.16	0.70
SO_2	5.64	24.71
VOCs	0.14	0.60
HAPs	0.06	0.27

(1) All particulate matter emissions are assumed to be $PM_{2.5}$ or smaller. Includes condensables.

d. The permittee shall maintain a minimal combustion chamber temperature of the Sulfur Recovery Incinerator (SRI) so as to ensure the effective operation of the unit. The determination of minimal combustion chamber temperature shall be based on data obtained from performance testing,

manufacturing recommendations, or operational experience. The permittee shall maintain on-site, and update as necessary, a certified report listing the minimal combustion chamber temperature. Any changes to the minimal combustion chamber temperature shall be accompanied by the date of the change and reason for the change;

e. The permittee shall, to the extent reasonably possible, operate the SRI at the minimum combustion chamber temperature as established under 4.1.12(d) at all times waste gases are vented to it. If an excursion from the minimum combustion chamber temperature occurs, the permittee shall attempt to immediately correct the problem and follow the record-keeping procedures under 4.4.3;

f. **45CSR6**
The Sulfur Recovery Incinerator is subject to the to all applicable requirements under 45CSR6 including the following:

(1) The permittee shall not cause, suffer, allow or permit particulate matter to be discharged from the flares into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

Incinerator Capacity	Factor F
A. Less than 15,000 lbs/hr	5.43
B. 15,000 lbs/hr or greater	2.72

[45CSR§6-4.1]

(2) No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.
[45CSR6 §4.3]

(3) The provisions of paragraph (i) shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.
[45CSR6 §4.4]

(4) No person shall cause or allow the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR6 §4.5]

(5) Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR6 §4.6]

(6) Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed five (5) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of

the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR6 §8.2]

g. **40 CFR 60, Subpart Ja**
The Unit 440: Sulfur Recovery Unit is subject to all applicable requirements under 40 CFR 60, Subpart Ja including those given below:

(i) Except as provided in paragraph (f)(3) of this section, each owner or operator of an affected sulfur recovery plant shall comply with the applicable emission limits in paragraph (f)(1) or (2) of this section.
[40 CFR §60.102a(f)]

(1) For a sulfur recovery plant with a design production capacity greater than 20 long tons per day (LTD), the owner or operator shall comply with the applicable emission limit in paragraph (f)(1)(i) or (ii) of this section. If the sulfur recovery plant consists of multiple process trains or release points, the owner or operator shall comply with the applicable emission limit for each process train or release point individually or comply with the applicable emission limit in paragraph (f)(1)(i) or (ii) as a flow rate weighted average for a group of release points from the sulfur recovery plant provided that flow is monitored as specified in §60.106a(a)(7); if flow is not monitored as specified in §60.106a(a)(7), the owner or operator shall comply with the applicable emission limit in paragraph (f)(1)(i) or (ii) for each process train or release point individually. For a sulfur recovery plant with a design production capacity greater than 20 long LTD and a reduction control system not followed by incineration, the owner or operator shall also comply with the H_2S emission limit in paragraph (f)(1)(iii) of this section for each individual release point.
[40 CFR §60.102a(f)(1)]

(A) For a sulfur recovery plant with an oxidation control system or a reduction control system followed by incineration, the owner or operator shall not discharge or cause the discharge of any gases containing SO_2 into the atmosphere in excess of the emission limit calculated using Equation 1 of [40 CFR §60.102a]. For Claus units that use only ambient air in the Claus burner or that elect not to monitor O_2 concentration of the air/oxygen mixture used in the Claus burner or for non-Claus sulfur recovery plants, this SO_2 emissions limit is 250 ppm_v (dry basis) at zero percent excess air.
[40 CFR §60.102a(f)(1)(i)]

4.1.13. **Flares**
The Emergency Flare (620-FL-1) and the Liquid Product Loadout Flare (640-FL-1) shall operate according to the following requirements:

a. Each flare shall be non-assisted and shall be designed and operated according to the requirements specified in 40 CFR 60, Section §60.18;

b. Each flare shall be designed, operated, and maintained according to the manufacturer's specifications and maintenance requirements so as to achieve, at a minimum, a hydrocarbon combustion rate of 98.0%;

c. Each flare shall be operated with a pilot flame present at all times, as determined by the methods specified in 4.2.7(b);

d. The Emergency Flare shall be operated at all times when emissions are vented to it and shall not combust in excess of 7,928 mmBtu of waste gases per year (any gas combusted in the pilot light does not count against this limit);

e. The Liquid Product Loadout Flare shall be operated at all times when emissions are vented to it and shall not combust in excess of 7,546 mmBtu of waste gases per year (any gas combusted in the pilot light does not count against this limit);

f. The maximum combustion exhaust emissions from waste gases sent to the specified flare for destruction shall not exceed the limits given in the following table:

Table 4.1.13(f): Flare Combustion Exhaust Emission Limits

Pollutant	PPH	TPY
Emergency Flare (620-FL-1)		
CO	306.91	1.23
NO_x	67.32	0.27
Liquid Product Loadout Flare (640-FL-1)		
CO	8.56	1.17
NO_x	1.88	0.26

g. The maximum uncombusted pass-through (non-combustion exhaust) waste gas emissions as emitted at the Emergency Flare shall not exceed the limits given in the following table:

Table 4.1.13(g): Emergency Flare Waste Gas Pass-Through Emission Limits

Pollutant	PPH	TPY
CO	24.73	0.02
SO_2	165.15	0.17
VOCs	1,100.19	1.10
HAPs	336.93	0.34

h. **45CSR6**
Each flare is subject to all applicable requirements under 45CSR6 including the following:

(1) The permittee shall not cause, suffer, allow or permit particulate matter to be discharged from the flares into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

Incinerator Capacity	Factor F
A. Less than 15,000 lbs/hr	5.43
B. 15,000 lbs/hr or greater	2.72

[45CSR§6-4.1]

(2) No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.
[45CSR6 §4.3]

(3) The provisions of paragraph (i) shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.
[45CSR6 §4.4]

(4) No person shall cause or allow the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR6 §4.5]

(5) Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR6 §4.6]

(6) Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed five (5) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR6 §8.2]

4.1.14. **Fuel Gas Requirement**

The fuel gas supplied by Unit 410 shall not contain hydrogen sulfide (H_2S) in a concentration greater than 0.04 grains per 100 cubic feet of fuel gas.

4.1.15. **Component Leaks**

The permittee shall mitigate the release of fugitive emissions according to the following requirements:

a. The permittee shall, within 180 days of facility startup, submit a modification or Class II Administrative Update, as applicable pursuant 45CSR13, to revise the number and type of components (valves, pump seals, connectors, etc.) in gas/vapor or light liquid (as applicable) listed in Attachment N of Permit Application R13-3435 or any amendments or revisions submitted thereto if the as-built number of components results in calculated VOC or HAP emissions in excess of those given under Attachment N;

b. As shown in Attachment N of Permit Application R13-3435, all compressor seals and pumps (in both light and heavy liquid service) shall be of leakless design, all open-ended lines shall be capped and sealed pursuant to §60.482-6a, and pressure-relief valves shall be operated pursuant to §60.482-4a; and

c. **40 CFR 60, Subpart GGGa**
The permittee shall meet the applicable Leak Detection and Repair (LDAR) requirements as given under 40 CFR 60, Subpart GGGa (which primarily incorporates by reference 40 CFR 60, Subpart VVa).

4.1.16. **Closed Vent Requirements**
The permittee shall meet, where not subject to closed vent requirements under 40 CFR Part 60 or Part 63, the following requirements below for any closed vent system that is required by this permit:

a. The permittee shall design and operate the closed vent system as determined following the procedures under 40 CFR 60, Subpart VVa for ongoing compliance;

b. The permittee shall meet the requirements specified in (1) and (2) of this section if the closed vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device or to a process;

(1) Except as provided in paragraph (2) of this section, you must comply with either paragraph (i) or (ii) of this section for each bypass device.

(i) You must properly install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device that could divert the stream away from the control device or process to the atmosphere that sounds an alarm, or initiates notification via remote alarm to the nearest field office, when the bypass device is open such that the stream is being, or could be, diverted away from the control device or process to the atmosphere; or

(ii) You must secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

(2) Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of paragraph (i) of this section. Pressure relief valves used to protect the fluid tanks from overpressure are not subject to this section.

4.1.17. **Emission Limits**
All emission points and fugitive emission sources not listed with a specific emission limit(s) in this permit is limited to the pollutant-specific emissions as given in Attachment N of Permit Application R13-3435.

4.1.18. **Applicable Rules**
The permittee shall meet all applicable requirements, including those not specified above, as given under 45CSR2, 45CSR5, 45CSR6, 45CSR7, 45CSR10, 40 CFR 60, Subparts Dc, Ja, Kb, Y, XX, GGGa, and QQQ. Any final revisions made to the above rules will, where applicable, supercede those specifically cited in this permit.

4.1.19. **Operation and Maintenance of Air Pollution Control Equipment**
The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.10.]

4.2. Monitoring, Compliance Demonstration, Recording and Reporting Requirements

4.2.1. **Maximum Design Capacity Compliance**

Compliance with the maximum design capacity limitations as given under 4.1. shall be based on a clear and visible boilerplate rating or on product literature, manufacturer's data, or equivalent documentation that shows that the specific emission unit(s) or processing line in question is limited by design to a throughput or production rate that does not exceed the specified value under 4.1.

4.2.2. **Maximum Design Heat Input Compliance**

Compliance with the various combustion unit MDHI limitations as given under 4.1. shall be based on a clear and visible boilerplate rating or on product literature, manufacturer's data, or equivalent documentation that shows that the specific emission unit(s) in question is limited by design to an MDHI that does not exceed the specified value under 4.1.

4.2.3. **Material/Production Throughputs**

To determine continuous compliance with maximum production, throughputs, and other limits given under in 4.1 of the permit, the permittee shall monitor and record the following:

Table 4.2.3: Facility Quantities Monitored/Recorded

Quantity Monitored/Recorded	Emission Unit(s)	Measured Units
Diesel	Production	gallons/year
Raw Gasoline	Production	gallons/year
Heavy Naphtha	Production	gallons/year
Light Naphtha	Production	gallons/year
LPG	Production	gallons/year
Sour Water	Production	gallons/year
Flake Residue	Production	tons/year
Elemental Sulfur	Production	tons/year
Liquid Ammonia	Production	tons/year
Unit 200 Coal	200-TC-105	tons/day
Feedstock Coal	100-TC-3	tons/year
PNG/Fuel Gas Combusted	500-SB-1	mmscf/year
Hydrogen Reformer Startup	700-HR-1	hours/year
Waste Gases Combusted	620-FL-1	mmBtu/year(1)
Waste Gases Combusted	640-FL-1	mmBtu/year(1)
Emergency Fire Pump Hours of Operation(2)	500-EG-1	Hours of Operation/Year
Storage Tank Throughputs	Various	Gallons/year

(1) This value may be based on a calculation of the volume of waste gases combusted in each flare and the weighted average heat content of the gases based on valid engineering estimate, testing, or another approved method.

(2) Strictly for the purposes of compliance with 4.1.11(a), only non-emergency hours of operation are required to be monitored. Subpart IIII, however, requires monitoring of all hours of operation.

4.2.4. **Fabric Filter/Baghouse Vents**

To determine continuous compliance with the filter/baghouse emission limits given under Section 4.1 of the permit, the permittee shall maintain and operate the control devices according to the requirements given under 4.1.18. Additionally, the permittee shall keep a record of all significant maintenance or repair performed on fabric filters/baghouses (changing out bags, replacing filter material, etc.). Unless specifically requested under 4.3.1, compliance with all fabric filter/baghouse mass emission limits shall be based on vendor information or vendor guarantees that show the maximum outlet grain loading emissions from the fabric filter is in compliance with the specific limit. The permittee shall maintain on-site vendor information or guarantees that the filters will meet this outlet limit.

4.2.5. **Sulfur Recovery Incinerator Monitoring**

The permittee shall install, calibrate, maintain, and continuously operate a monitoring device for the measurement of the Sulfur Recovery Incinerator combustion chamber temperature. The monitoring device is to be certified by the manufacturer to be accurate within ±1% in degrees Fahrenheit.

4.2.6. **Ultra Low Sulfur Diesel Fuel**

For the purposes of demonstrating continuing compliance with the maximum sulfur content limit under 4.1.11(a), the permittee shall, at a minimum of once per calendar year, obtain from the fuel oil supplier a certification of the sulfur content of the fuel combusted in the Emergency Fire Pump Engine. An alternative means of determining compliance with 4.2.6 will be subject to prior approval from the Director.

4.2.7. **Flares**

The permittee shall meet the following Monitoring, Compliance Demonstration, Recording and Reporting Requirements for the Emergency Flare (620-FL-1) and the Liquid Product Loadout Flare (640-FL-1):

a. To demonstrate compliance with 4.1.13(b), the permittee shall maintain records of all substantive actions undertaken in compliance with the manufacturer's specifications for operation and maintenance to maintain the minimum control efficiency;

b. To demonstrate compliance with the pilot flame requirements of 4.1.13(c), the presence of a pilot flame shall be continuously monitored using a thermocouple or any other equivalent device to detect the presence of a flame when emissions are vented to it. The pilot shall be equipped such that it sounds an alarm, or initiates notification via remote alarm to the control room, when the pilot light is out;

c. For any absence of pilot flame, or other indication of smoking or improper equipment operation, the permittee must ensure the equipment is returned to proper operation as soon as practicable after the event occurs. At a minimum, the permittee must: (1) Check the air vent for obstruction. If an obstruction is observed, you must clear the obstruction as soon as practicable. (2) Check for liquid reaching the flare;

d. The permittee shall maintain records of the times and duration of all periods when the pilot flame was not present and vapors were vented to the device. The permittee shall maintain records of any inspections made pursuant to 4.2.8; and

e. Any time the flare is not operating when emissions are vented to it, shall be reported in writing to the Director of the DAQ as soon as practicable, but within ten (10) calendar days of the discovery.

4.2.8. **Flares/SRI Visible Emissions Compliance Demonstrations**

To demonstrate compliance with the visible emissions requirements of 45CSR6, the permittee shall conduct visible emission checks, opacity monitoring, and record-keeping for the Emergency Flare (620-FL-1), the Liquid Product Loadout Flare (640-FL-1), and the Sulfur Recovery Incinerator (440-SRI-1) in accordance with the following:

a. The visible emission check shall determine the presence or absence of visible emissions. The observations shall be conducted according to Section 11 of EPA Method 22. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course. The observation period shall be:

(1) a minimum of two (2) hours at initial commissioning;
(2) a minimum of two (2) hours during periods of annual testing; and
(3) a minimum of 15 minutes each time the incinerator is manually started. "Manually started," for the purposes of this permit, means that a company representative is at the facility and is conducting work on the flare to physically repair and/or restart the flare. Manually starting the flare does not include the flare restarting by itself after operations have ceased based on the control logic of the flare even if work may be occurring around the flare but not to the flare itself (i.e., gas supply interruption where the gas supply is restored, and the flare automatically restarts under the control logic of the flare).

b. The visible emission check shall be conducted initially within 180 days of start-up and thereafter at a minimum of at least once per each period of 12 months;

c. If visible emissions are identified during the visible emission check, or at any other time, the permittee shall conduct a 40 CFR 60, Appendix A, Method 9 evaluation within twenty four (24) hours. A Method 9 evaluation shall not be required if the visible emissions condition is corrected within twenty four (24) hours from the time the visible emission condition was identified and the unit is operated at normal operating conditions.

d. The permittee shall maintain records of the visible emission opacity tests and checks. The permittee shall maintain records of all monitoring data required by 4.2.8 documenting the date and time of each visible emission check, the emission point or equipment/ source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the evaluation, the record of observation may note "out of service" (O/S) or equivalent; and

g. Any deviation of the allowable visible emission requirement for any emission source discovered during observation using 40CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director of the DAQ as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

4.2.9. **Other Visible Emissions Compliance Demonstrations**

Visible emissions Monitoring, Compliance Demonstration, Recording and Reporting shall be in accordance with the following requirements:

a. **45CSR2**

Upon request by the Secretary, compliance with the visible emission requirements of 3.1 [of 45CSR2] shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Secretary. The Secretary may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 3.1 [of 45CSR2]. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control;
[40CSR§2-3.2]

b. **45CSR6**

Compliance with the 45CSR6 opacity requirements given under 4.1.12(f) and 4.1.13(g) shall be based on compliance with 4.2.8;

c. **45CSR7**

At such reasonable time(s) as the Secretary may designate, compliance with the visible emission requirements of 45CSR7 shall be determined in accordance with the procedures outlined under 45CSR7A; and

d. **40 CFR 60, Subpart Y**

The permittee shall meet all applicable visible emissions Monitoring, Compliance Demonstration, Performance Testing, Recording and Reporting requirements as given under 40 CFR 60, Subpart Y, Sections §60.250 through §60.255;

4.2.10. **Closed Vent Requirements**

To demonstrate compliance with the closed vent system requirements of 4.1.13, the permittee shall:

a. **Initial requirements.** The permittee shall follow the procedures in 40 CFR 60, Subpart VVa. The initial inspection shall include the bypass inspection, conducted according to paragraph (b) of this section.

b. **Bypass inspection.** Visually inspect the bypass valve during the initial inspection for the presence of the car seal or lock-and-key type configuration to verify that the valve is maintained in the non-diverting position to ensure that the vent stream is not diverted through the bypass device. If an alternative method is used, conduct the inspection of the bypass as described in the operating procedures.

c. **Unsafe to inspect requirements**. You may designate any parts of the closed vent system as unsafe to inspect if the requirements in paragraphs (1) and (2) of this section are met. Unsafe to inspect parts are exempt from the inspection requirements of paragraphs (a) and (b) of this section.

(1) You determine that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the requirements.

(2) You have a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

d. To demonstrate compliance with the closed vent monitoring requirements given under paragraphs (a) through (c) above, the following records shall be maintained:

(1) The initial compliance requirements;

(2) If you are subject to the bypass requirements, the following records shall also be maintained:

(i) Each inspection or each time the key is checked out or a record each time the alarm is sounded;

(ii) Each occurrence that the control device was bypassed. If the device was bypassed, the records shall include the date, time, and duration of the event and shall provide the reason that the event occurred. The record shall also include the estimate of emissions that were released to the environment as a result of the bypass.

(3) Any part of the system that has been designated as "unsafe to inspect" in accordance with 4.2.10(c).

4.2.11. **SCR Parameter Monitoring**
Pursuant to 4.1.6(b)(3), the permittee shall install, maintain, and operate instrumentation to continuously monitor and record the Hydrogen Reformer exhaust temperature and the aqueous ammonia injection rate so as to ensure proper operation of the SCR.

4.2.12. **Fuel Gas Monitoring**
Compliance with the H_2S fuel monitoring requirement under 4.1.14 shall be in accordance with the requirements given under §60.107a(a)(2)

4.3. Testing Requirements

4.3.1. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3 of this permit, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in this permit and/or applicable regulations.

4.3.2. **Slurry Feed Heater/Hydrogen Reformer Emissions Testing**
Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup, the permittee shall conduct, or have conducted, in accordance with a protocol submitted pursuant to 3.3.1(c), performance tests on the Slurry Feed Heater and Hydrogen Reformer (both during startup and during SCR operation) to determine compliance with the NO_x and CO emission limits given in Table 4.1.5(a) and 4.1.6(a), respectively.

4.3.3 **Performance Testing Schedule**
With respect to the performance testing required on the Hydrogen Reformer above under Section 4.3.2, the permittee shall, after the initial performance test, periodically conduct additional performance testing on the specified sources according to the following schedule:

Table 4.3.3.: Performance Testing Schedule

Test	Test Results	Retesting Frequency
Initial Baseline	<50% of weight emission standard	Once/3 years
Initial Baseline	between 50% and 80 % of weight emission standard	Once/2 years
Initial Baseline	>80% of weight emission standard	Annual
Annual	after three successive tests indicate mass emission rates <50% of weight emission standard	Once/3 years
Annual	after two successive tests indicate mass emission rates <80 % of weight emission standard	Once/2 years
Annual	any tests indicates a mass emission rate >80% of weight emission standard	Annual
Once/2 years	After two successive tests indicate mass emission rates <50% of weight emission standard	Once/3 years
Once/2 years	any tests indicates a mass emission rate <80 % of weight emission standard	Once/2 years
Once/2 years	any tests indicates a mass emission rate >80% of weight emission standard	Annual
Once/3 years	any tests indicates a mass emission rate <50% of weight emission standard	Once/3 years
Once/3 years	any test indicates mass emission rates between 50% and 80 % of weight emission standard	Once/2 years
Once/3 years	any test indicates a mass emission rate >80% of weight emission standard	Annual

4.3.4. **Fuel Gas Testing**

In order to show compliance with 4.1.14, within 60 days after achieving the maximum fuel gas production rate at which the facility will be operated, but not later than 180 days after initial startup, the permittee shall conduct, or have conducted, in accordance with a protocol submitted pursuant to 3.3.1.c., a test on the fuel gas to determine the sulfur content and the HAP content of the fuel gas.

4.3.5. **SRI Input Streams Testing**

In order to show compliance with 4.1.12(c), within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup, the permittee shall conduct, or have conducted, in accordance with a protocol submitted pursuant to 3.3.1.c., a test on the SRI input streams to determine sulfur content and HAP content of the waste gases. The results to this test shall be used to show compliance with the input gas stream assumptions used to calculate the SRI emissions in Attachment N of Permit Application R13-3435 including the speciated sulfur limits given under 4.1.7(b).

4.3.6. **Test Methods**

In all performance testing required by this permit, the permittee shall use test methods approved in writing by the Director in a protocol submitted pursuant to 3.3.1(c).

4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;
e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

4.5. Additional Reporting Requirements

4.5.1. The permittee shall submit the following information to the DAQ according to the specified schedules:

a. The permittee shall submit reports of all required monitoring on or before September 15 for the reporting period January 1 to June 30 and March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports; and

b. The permittee shall submit to the Director on or before March 15, a certification of compliance with all requirements of this permit for the previous calendar year ending on December 31. If, during the previous annual period, the permittee had been out of compliance with any part of this permit, it shall be noted along with the following information: 1) the source/equipment/process that was non-compliant and the specific requirement of this permit that was not met, 2) the date the permitted discovered that the source/ equipment/process was out of compliance, 3) the date the Director was notified, 4) the corrective measures to get the source/equipment/process back into compliance, and 5) the date the source began to operate in compliance. The submission of any non-compliance report shall give no enforcement action immunity to episodes of non-compliance contained therein.

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] _____ _____
(please use blue ink) Responsible Official or Authorized Representative Date

Name and Title _____ _____
(please print or type) Name Title

Telephone No._____ Fax No. _____

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[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(I) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.